

(19) World Intellectual Property Organization
International Bureau



(43) International publication date
2 October 2003 (02.10.2003)

PCT

(10) International publication number
WO 03/080710 A1

(51) International patent classification⁷: C08G 77/08
(21) International application number: PCT/FR03/00888
(22) International filing date: 20 March 2003 (20.03.2003)
(25) Language of filing: French
(26) Language of publication: French

(30) Data relating to the priority:
02/03,769 26 March 2002 (26.03.2002) FR

(71) Applicant (for all designated States except US): RHODIA CHIMIE [FR/FR]; 26 Quai Alphonse Le Gallo, F-92100 BOULOGNE-BILLANCOURT (FR).

(72) Inventors; and

(75) Inventors/Applicants (US only): BOISSON, Franande [FR/FR]; 155 rue Léon Blum, F-69100 VILLEURBANNE (FR). GAMBUT, Lucile [FR/FR]; 16 rue des Tuilliers, F-69003 LYON (FR). MIGNANI, Gérard [FR/FR]; 2 avenue des Frères Lumière, F-69008 LYON (FR).

(74) Representatives: CABINET PLASSERAUD etc.; 84 rue d'Amsterdam, F-75440 PARIS CEDEX 09 (FR).

(81) Designated states (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated states (regional): ARIPO Patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian Patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European Patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI Patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- With the International Search Report.
- Before expiry of the period provided for amending the claims, will be republished if such amendments are received.

For an explanation of the two-letter codes and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette

As printed

(54) Title: METHOD FOR PREPARING FUNCTIONALISED POLYORGANOSILOXANE RESINS BY REDISTRIBUTION IN THE PRESENCE OF TRIFLIC ACID AND/OR AT LEAST OF ONE OF ITS DERIVATIVES AND NON-BASIC INERT FILLER

(54) Titre : PROCÉDE DE PREPARATION DE RESINES POLYORGANOSILOXANE FONCTIONNALISEES PAR REDISTRIBUTION EN PRESENCE D'ACIDE TRIFLIQUE ET/OU D'AU MOINS L'UN DE SES DERIVES ET DE CHARGE INERTE NON BASIQUE

(57) Abstract: The invention concerns a method for preparing functionalised polyorganosiloxane resins (POS) and comprising units M: (R₃SiO_{1/2}), Q: (SiO_{4/2}) and M': (Y₃R₃₋₄SiO_{1/2}) and optionally D: (R₂SiO_{2/2}) and/or D': (RYSiO_{2/2}) and T: (RSiO_{3/2}) and/or T': (YSiO_{3/2}), wherein, in said units R = C₁-C₁₀ alkyl or a C₈-C₁₂ aryl, and Y a functional group (for example, Si-H), by redistribution of POS resins, using POSf bearing functional groups M' and/or D' and/or in the presence of an acid catalyst such as triflic acid or one of its derivatives and a non-basic inert filler: carbon black, diatom earth, zeolite or acid or neutral oxide (Al₂O₃, Na₂O, TiO₂, MgO, silica). The invention also concerns said catalytic system.

(57) Abrégé : La présente invention concerne un procédé de préparation de résines polyorganosiloxanes (POS) fonctionnalisées et comprenant des motifs M : (R₃SiO_{1/2}), Q : (SiO_{4/2}) et M' : (Y₃R₃₋₄SiO_{1/2}) et éventuellement D: (R₂SiO_{2/2}) et/ou D' : (RYSiO_{2/2}) et T : (RSiO_{3/2}) et/ou T' : (YSiO_{3/2}), avec, dans ces motifs R =alkyle en C₁-C₁₀ ou un aryle en C₈ C₁₂, et Y groupement fonctionnel (e.g. Si-H), par redistribution de résines POS à l'aide de POSf porteurs de motifs fonctionnels M' et/ou D' et/ou en présence d'un catalyseur acide du type acide triflique ou l'un de ses dérivés et d'une charge inerte non-basique : noir de carbone, terre diatomée, zéolithe ou oxyde acide ou neutre (Al₂O₃, Na₂O, TiO₂, MgO, silice). La présente invention concerne encore le système catalytique susvisé.

WO 03/080710 A1